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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,755	02/06/2004	Jon W. Lai	ATOMP004	4021

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AKA CHAN LLP
900 LAFAYETTE STREET
SUITE 710
SANTA CLARA, CA 95050

EXAMINER	
KEMMERLE III, RUSSELL J	
ART UNIT	**PAPER NUMBER**
1731	

NOTIFICATION DATE	DELIVERY MODE
09/11/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-INBOX@AKACHANLAW.COM

Office Action Summary	Application No.	Applicant(s)	
	10/773,755	LAI ET AL.	
	Examiner	Art Unit	
	Russell J. Kemmerle	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-25 and 31-65* is/are pending in the application.

4a) Of the above claim(s) *32-65* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21-25 and 31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 21-25 and 31, drawn to a method for producing an apparatus for containing a workpiece, classified in class 65, subclass 36.

II. Claims 32-65, drawn to a method for using a container to flow a fluid over a workpiece, classified in class 432, subclass 266.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the specific limitations of independent claims 32, 37, 42, 50, 59 and 63 (invention II) of the apparatus are not a required result from the method of producing the apparatus as disclosed in invention I.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required

because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Newly submitted claims 32-65 are directed to an invention that is independent or distinct from the invention originally claimed for the reasons discussed above.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 32-65 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 21-25 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beshoory (US Patent 4,763,536).

Beshoory discloses a furnace tube, which includes fluid inlet and outlet means positioned on the same end of the tube (see Fig. 2). Beshoory discloses a tube having a fluid inlet **43** which is connected to a coil portion **45** (i.e., a conduit) which leads to a diffuser **46** where the fluid is released into the tube, generally to interact with a sample placed therein, the fluid is then removed from the tube through a fluid outlet **44** (Col 2 lines 43-47). It should be noted from Fig. 2 that fluid inlet **43** and fluid outlet **44** are both on the same side of the tube.

While Beshoory discloses additional openings in the tube (apertures **33**), they are needed only for flowing a purging gas through the tube in situations where a volatile gas is used or created during the heat treatment (Col 2 lines 56-66). Thus it would have been obvious to one of ordinary skill in the art, at the time of invention by applicant, that when such a purge was not necessary that the fluid only enter the interior chamber through the fluid inlet **43**.

Beshoory further discloses that the fluid flow be a gas flow through the tube (Col 2 lines 43-50).

Beshoory further discloses that the outer tube (i.e., the housing) can be made of quartz or other suitable materials (Col 2 lines 2-5).

Beshoory is relied upon as discussed above, but does not discuss what material the coil portion be made of (specifically does not mention that it be quartz), or that the coil portion be quartz welded to the quartz outer tube.

While Beshoory does not specifically disclose a material to be used for the coil portion, he does disclose that many other parts of the assembly are made from quartz including the outer tube (Col 2 lines 2-5) and the diffuser at the end of the coil portion (Col 2 lines 51-52). It would have been obvious to one of ordinary skill in the art, at the time of invention by applicant, that the coil portion be made of the same quartz material as the outer tube and the diffuser since that would reduce the amount of different materials in the system, and thus make it easier to ensure that the container is inert to the fluid being introduced and would not react with it.

While Beshoory does not say that the coil portion be attached to the outer tube by quartz welding, as applicant points out, such a process is known in the art as a method of joining two quartz pieces together (applicant's specification, pages 18-19, paragraph 43). It would have been obvious to one of ordinary skill in the art, at the time of invention by applicant, to have used quartz welding to join the qurtz coil portion to the quartz outer tube as a well known and understood method of attaching two pieces of quartz material.

Referring to claim 31, Beshoory does not disclose where the second end of said housing comprises no openings. However, the openings on the second end of the housing disclosed by Beshoory (apertures **33**), as discussed above, are required only for an optional purge step when an inert gas is required to remove volatiles from the housing. When such a step is not required, it would be obvious to one skilled in the art that such openings would not be needed on the second end of the housing, and thus it would be obvious to create a housing having no openings on the second side.

Response to Arguments

Applicant's arguments with respect to claims 21-25 and 31 have been considered but are moot in view of the new ground(s) of rejection, which were necessitated by amendment.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell J. Kemmerle whose telephone number is 571-272-6509. The examiner can normally be reached on Monday through Friday, 8:30-4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

/RJK/